Second National Conference on Ecosystem Restoration

US Army Corps of Engineers

Bang for the Buck: A Look at Ecosystem Restoration Outputs from Completed Corps Projects

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Project Planning and Review
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Background

US Army
Corps of Engineers

- Restoration Project Purpose WRDA 1990
- Authorizations in 1996, 1999, & 2000
- Excluding Everglades, Upper Miss, etc.
- About 28 Chief's Reports
- Estimated Cost Over $1 Billion

Cost and Benefit Data

US Army Corps of Engineers

- Costs Are for Restoration Work Only
- Planning Estimates from Chief's Reports
- Cost Numbers Generally Comparable at a FY 2007 Price Level

Constructed Ecosystem Restoration Projects

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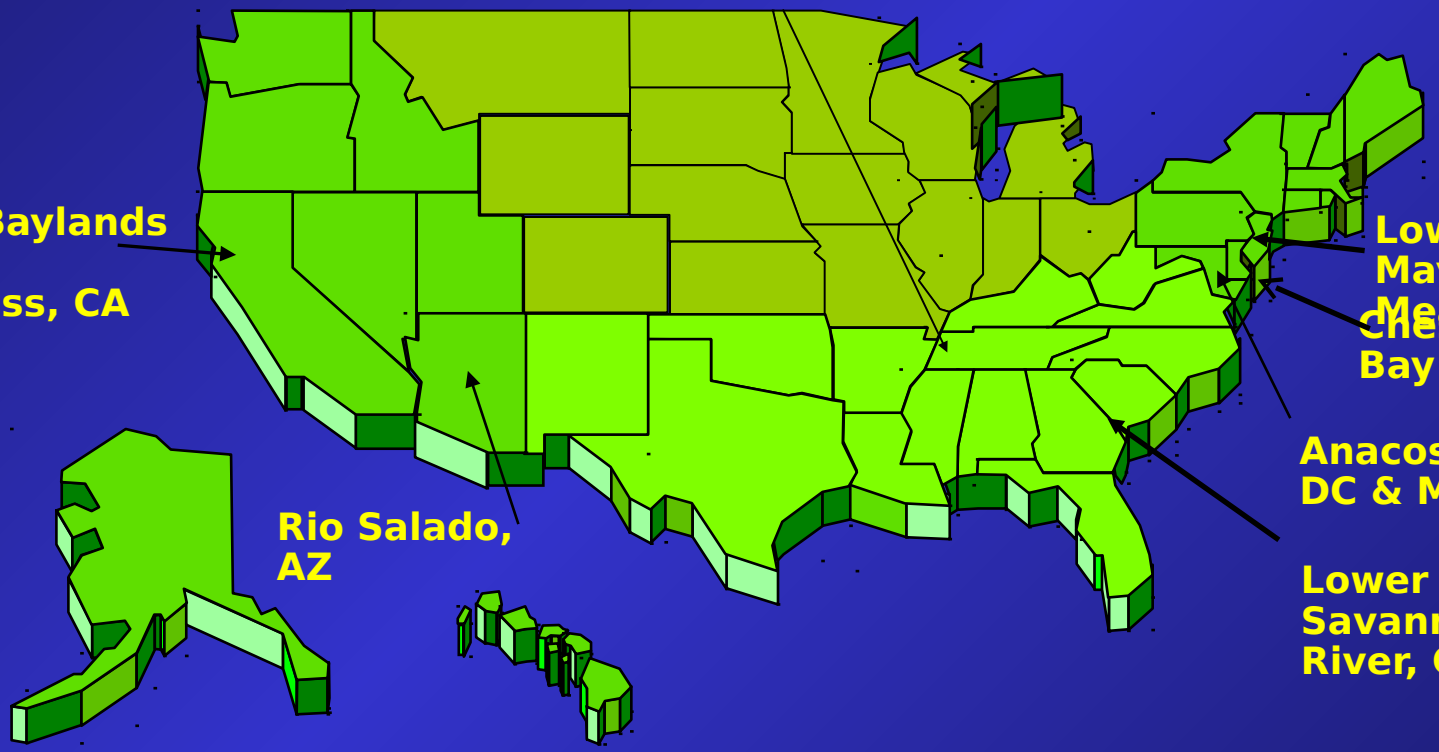
Wolf River, TN
Sonoma Baylands and Yolo Bypass, CA
Rio Salado, AZ
Lower Cape May Meadows, NJ
Chesapeake Bay Oysters
Anacostia River, DC & MD
Lower Savannah River, GA

Anacostia River and Tributaries, DC Portion Baltimore District

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Anacostia River and Tributaries, DC Portion Baltimore District

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- Authorized WRDA 1996
- Construction Completed 2005
- Estimated Cost $9.25 million
- Estimated Benefits 75-Acres Freshwater Tidal Wetlands
- Actual Construction Cost $7.7 Million
- Actual Benefits About 51 Acres
- Sponsor: District of Columbia with NPS
- Kevin Luebke 410-962-6141

Lower Savannah River, GA Savannah District

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Lower Savannah River, GA
Savannah District

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- Authorized WRDA 1996
- Construction Completed 2002
- Estimated Cost $3.4 Million
- Estimated Benefits 4,700 Acres Bottomland Hardwood/Cypress Swamp
- Actual Cost $3.4 Million
- Actual Benefits 4,700 in drought years
- Sponsor: City of Savannah with USFWS
- Bill Bailey 912-652-5781

Lower Cape May Meadows, NJ Philadelphia District

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Before

After (2005)

Lower Cape May Meadows, NJ Philadelphia District

US Army Corps of Engineers

- Authorized WRDA 1999 - Multipurpose
- Construction Completed 2005
- Estimated Cost $3.1 Million
- Estimated Benefits 343 Acres
- Actual Construction Cost $7.4 Million
- Actual Benefits 343 Acres
- ESA: Piping Plovers 9 Chicks from 6 Pairs
- Sponsor: State of New Jersey
- Beth Brandreth 215-656-6558

Rio Salado, Salt River
Phoenix, AZ
Los Angeles District

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Rio Salado, Salt River Phoenix, AZ Los Angeles District

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- Authorized WRDA 1999
- Construction Will Be Completed in 2008
- Estimated Cost $100 Million
- Estimated 525 Acres Mixed Aquatic SW Desert Habitat
- Actual Construction Cost $106 Million
- Aquatic Benefits Reduced Due to FAA Issue
- Sponsor: City of Phoenix
- Mike Ternak 602-640-2004

Wolf River, TN
Memphis District

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Wolf River, TN
Memphis District

US Army
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- Authorized WRDA 2000
- Construction about 75 Percent Complete
- Estimated Cost $11.6 Million
- Estimated Benefits Protection of 2,000 Acres Wetlands/Bottomland Hardwoods
- Actual Construction Cost $13.1 Million
- Four Weirs Stabilize 10 Feet of Headcutting
- Sponsor: Shelby Co. & Chickasaw Basin Auth.
- Leighann Gipson 901-544-4015

Chesapeake Bay Oyster Restoration Norfolk District

US Army Corps of Engineers

Chesapeake Bay Oyster Restoration (Wicomico River) Norfolk District

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- Section 704(b), WRDA 1986, as amended
- Construction Completed in 2005
- Construction Cost $2 Million
- Benefits 64 Acre Network of Sanctuary Reefs
- Highest Chesapeake Recruitment Level
- Evidence of Disease Resistance
- Sponsor: State of Virginia
- Craig Seltzer 757-201-7390
- Claire O'Neil 410-962-0876 (Maryland Bay)

Yolo Basin Wetlands, CA Sacramento District

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Yolo Basin Wetlands, CA Sacramento District

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- Authorized WRDA 1992, Section 344
- Construction Completed 1997
- Estimated Benefits 3,700 acres
- Estimated Cost $5.4 Million
- Actual Construction Cost $11.9 Million
- ESA: Giant Garter Snake, Swainson's Hawk, Tri-colored Blackbird
- Sponsor: California – Dept of Fish and Game
- Miki Fujitsubo 916-557-7440

Sonoma Baylands, CA
San Francisco District

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Sonoma Baylands, CA
San Francisco District

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- Authorized WRDA 1986 Oakland Harbor 42-Ft
- Construction Completed 1996
- Construction Cost $10 Million
- Benefits 320 Acres Marine Tidal Wetlands
- ESA: Salt Marsh Harvest Mouse and California Clapper Rail
- Sponsor: Port of Oakland
- Eric Jolliffe 415-503-6869

Conclusions

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- General Agreement of Project Costs
- Benefit Data Will Improve with Monitoring
- Partnerships Are Critical
- Central Data Source/Benefit Metrics Needed
- Expect the Unexpected
- Funding for Future Work is a Challenge
- Corps Expertise Fits With Complex